

July 7. 1999 OFFICE STIGATION

VIA FAX

Associate Administrator for Enforcement National Highway Traffic Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

997-181 (1)

Re: Safety Recall Campaign

- Caterpillar Engine with Eaton Auto-shift Transmission

Dear Sir:

On June 29, 1999, PACCAR Inc decided that a defect which relates to motor vehicle safety exists in the Kenworth Truck Company and Peterbilt Motors Company vehicles described below, and is furnishing notification to the NHTSA in accordance with 49 CFR Part 573 "Defects and Noncompliance Reports".

## Description of the Defect

Caterpillar engines when mated with an Eaton Autoshift transmission can stall because of software anomalies. When the cruise control is ON, the "Auto Retarder in Cruise" engine parameter is set to ON, and when the "Low" gear is selected via the downshift button or selector, the Jacobs brake may reactivate while the transmission passes through neutral, causing the engine speed to drop to 300 RPM or less. The programming of the Caterpillar engine Electronic Control Unit (ECU) causes this.

Both the power steering pump and air compressor are engine driven. Engine stall can therefore significantly increase steering effort. Without an operational air compressor, only a limited number of service brake applications are possible before the spring (emergency) brakes apply. Considering the sequence of events causing this engine stall are typical with descending a steep grade, vehicle control could be adversely affected.

# Identification of Affected Vehicles

Based upon preliminary information from an initial search of manufacturing records, the following vehicles are involved:

- Kenworth T600, T800, T2000 and W900 manufactured between December 1, 1998 and June 30, 1999. From the initial review, Kenworth determined the recall population is comprised of 95 vehicles in total.
- Peterbilt models 357, 377, 378, 379 and 385 which were manufactured between
  December 1, 1998 and June 24, 1999. Peterbilt determined the recall population is comprised of 177 vehicles in total.

Associate Administrator for Enforcement National Highway Traffic Safety Administration July 7, 1999 Page 2

98V-161 (62)

## Chronology of Events Leading to Recall

In April 1999 Peterbilt received a report of a driver having the engine stall while going down a grade. Peterbilt requested Caterpillar and Eaton to accompany them on a test of the vehicle that took place on May 28, 1999. Data gathered by Caterpillar and Eaton was analyzed to determine the cause of the failure and during a teleconference with PACCAR, Caterpillar stated the problem was due to the programming of their engine ECU.

## Description of Remedy

Caterpillar has determined that turning the "Auto Retarder in Cruise" engine parameter to OFF is an appropriate interim fix, because with this feature set to OFF, the engine functions properly when "Low" gear is selected. Caterpillar is making software changes that will be incorporated into the engine ECU. The engines in the field will be updated with the new software when this new design is validated.

### Identification of Recall Schedule

PACCAR anticipates that the owner notification campaign will be initiated within 30 days. Kenworth has assigned the number "99KW3" to this campaign. The Peterbilt number for the campaign is "799-C".

Very truly yours,

Kenneth R. Brownstein

Senior Counsel

J: ibegtyropeg**ile 69900 do.** gluc



998-023

Associate Administrator for Enforcement National Highway Traffic Safety Administration 400 Seventh Street SW Washington, D.C. 20590

Re: Caterpillar Engines ADEM III Software/Eaton Autoshift Recall

Kenworth Recall No.: 99KW02 Peterbilt Recall No.: 799C

Dear Sir or Madam:

As Caterpillar has now filed an initial defect letter with NHTSA regarding this matter, PACCAR and Caterpillar have agreed that Caterpillar will to conduct the recall on behalf of Kenworth and Peterbilt. Caterpillar will notify customers and dealers and will provide quarterly reports on this matter. Should you have any questions or concerns, please contact me. Thank you.

Very truly yours,

Kenneth R. Brownstein

Herrick Brown

Senior Counsel

KRB/cam j/mourther/moult/software 7-29-99.doc